



UNITED STATES PATENT AND TRADEMARK OFFICE

51/

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,855	06/19/2001	Ding Jong Wang	PMXP0107USA	7087
27765	7590	05/18/2005	EXAMINER	
NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)			NGUYEN, KIMNHUNG T	
P.O. BOX 506			ART UNIT	PAPER NUMBER
MERRIFIELD, VA 22116			2674	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,855

Applicant(s)

WANG ET AL.

Examiner

Kimnhung Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE Amendment filed on 4/18/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The claims 1-10 and 12-22 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 8-10, 12-15, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levi Montalcini (US 6,865,718) in view of Lo (US 5,699,083).

Regarding claims 1, 23 Montalcini discloses in figure 1A, 3 that a pointing device (mouse) electrically connected to a computer for controlling movements of a cursor (113, see fig. 1A) on a display device of the computer (109), the pointing device comprising a housing; a pointing unit (see memory 114, and processor 115) installed inside the housing for generating pointing signals to control movements of the cursor; a rollable device (106, fig. 1A) adapted to control scrolling of a window shown on the display device when rotated by a user (see abstract, see col. 2, lines 60-65); and a control unit (100) for controlling the pointing device (see fig. 1A). However, Montalcini does not disclose that the control unit controls the light source for illuminating the rollable device. Lo discloses a cursor control device having a wheel (17) and light source (29) and the wheel may synchronously rotate with the ball a light source (29) and a sensor are respectively disposed on the both sides of the wheel (see abstract, see col. 2, lines 39-

Art Unit: 2674

40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of light source disposed on the both sides of the wheel as taught by Lo into the pointing device of Levi Montalcini because this would provide the receiving of the light source and the sensor through the hole and for allowing entrance of light passing via the wheel (see column 2, lines 43-52).

Regarding claim 3 is dependent upon claim 1, and are rejected on the same reasons claim 1, furthermore, Levi Montalcini discloses that the rollable is a rolling wheel (106), however, Montalcini does not disclose that the roller comprises a reflecting surface for reflecting the light. Lo discloses an inherent a reflecting surface for reflecting the light because the roller provided by the light source that Lo discloses above.

Regarding claim 8, is dependent upon claim 1, and is rejected on the same reasons claim 1. Levi Montalcini further discloses that the rollable device is a trackball (see col. 2, lines 30-32).

Regarding claim 9, Levi Montalcini does not disclose that the light source is positioned adjacent to the rollable. Lo discloses the light source (29) is positioned adjacent to the rollable (17, see abstract, see col. 2, lines 39-52).

Regarding claim 10 is dependent upon claim 1, and is rejected on the same reasons claim 1. However, Levi Montalcini does not disclose the light source comprises at least one light-emitting diode. Lo discloses the light source (29) such as LED (see column 2, lines 39-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of light source is a LED disposed on the both sides of the wheel as taught by Lo into the pointing device of Levi Montalcini because this would provide the receiving of

Art Unit: 2674

the light source and the sensor through the hole and for allowing entrance of light passing via the wheel (see column 2, lines 43-52).

Regarding claim 12, Levi Montalcini disclose that the computer comprises a driver for detecting a state of the computer and transmitting a corresponding state signal to the pointing device (see col. 5, lines 33-44).

Regarding claim 13, Levi Montalcini discloses that the computer further comprises a user interface program for establishing (see fig. 3). Lo discloses an illumination setting for the illumination mode (see light source as discussed above).

Regarding claims 14-15, 21, Montalcini discloses that the window in which the cursor is located supports a scrolling navigation function, and then transmit a corresponding state signal to the pointing device (see figs. 1 and 3).

3. Claims 2, 4, 5, 6, 7, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levi Montalcini (US 6,865,718) and Lo (US patent 5,699,083) as applied to claim 1 in view of Merminod et al. (US patent 6,157,369).

Levi Montalcini and Lo discloses that the pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the computer, the pointing device comprising a housing; a pointing unit installed inside the housing for generating pointing signals to control movements of the cursor; a rollable device a light source through the wheel as disclosed above. However, Levi Montalcini and Lo do not disclose that the rollable device comprises a transparent material; the rolling wheel and the ring being made of a transparent material to allow the light passing through the ring; the pointing device comprises a

Art Unit: 2674

support and electrical conduction device; the light source comprising at least one light-emitting diode; and wherein pointing device comprises a at least one button; wherein pressing of the button in a predetermined and causes the control unit to transmit a feedback signal to the computer; and when the rollable device is pressed downwards the button becomes activated.

Regarding claim 4, Merminod et al. discloses in figure 3 that the rolling wheel comprises a roller (12) and a ring (40), and the ring surrounding an outer circumference of the roller (see figure 3).

Regarding claim 7, Merminod et al. discloses in figures 2-3 the pointing device comprises a support (28) (see figures 2-3, column 3, lines 18-20) and an electrical conduction device.

Regarding claims 18-20, Merminod et al. discloses a roller device comprising at least one button (see press down of microswitch 34, see column 3, lines 39-40), and device is illuminated cause the control unit to transmit a feedback signal to the computer, or rollable device is pressed downwards, the button becomes activated (see column 4, lines 6-13).

From the claims 6-7, 9-10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of rolling wheel comprising a ring, a support, with a button activated to transmit a feedback signal to the computer as taught by Merminod et al. into the pointing device having roller of Levi Montalcini and Lo's system because this would support the roller, and give the user a noticeable feedback feel at the point where the switch has been activated, and improve the friction of the user's finger when rotating the roller (see Merminod et al., column 4, lines 6-13, and lines 57-60).

Art Unit: 2674

From the claims 2, 4, it would have been obvious for Levi Montalcini, Lo and Merminod et al.'s system to have the ring being made of a transparent material as claimed since such a modification would have involved a mere change in the material of a system. A change in material is generally recognized as being within the level of ordinary skill in the art.

4. Claims 16-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levi Montalcini (US patent 6,865,718) and Lo (US patent 5,699,083) and Merminod et al. (US patent 6,157,369) and in view of Gentner et al. (US patent 6,271,838).

Montalcini, Lo, Merminod et al., and Gentner et al. disclose every feature of the claimed invention, excluding the computer has received new e-mail and then transmit to a pointing device. Gentner et al. discloses in figures 2 and 5 a graphical user interface having the mail view application as display of the window. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the mail view application as display in the window as taught by Gentner et al. into the computer system of Montalcini, Lo and Merminod et al. Gentner et al.'s system because this would provide to the users with incoming e-mail, calendaring, name directory access, and internet browsing capabilities all written in Java programming language (see Gentner et al., see column 1, lines 31-37).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

Art Unit: 2674

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen
May 13, 2005



ALEXANDER EISEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2600